



## PATENT COOPERATION TREATY

**PCT****INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P036721/WO/1	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/EP2003/012575	International filing date ( <i>day/month/year</i> ) 11 November 2003 (11.11.2003)	Priority date ( <i>day/month/year</i> ) 19 December 2002 (19.12.2002)
International Patent Classification (IPC) or national classification and IPC G07C 9/00		
Applicant DAIMLERCHRYSLER AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 30 April 2004 (30.04.2004)	Date of completion of this report 11 October 2004 (11.10.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/012575

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

the international application as originally filed  
 the description:

pages \_\_\_\_\_ 1-11 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the claims:

pages \_\_\_\_\_ 1-6 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19)  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the drawings:

pages \_\_\_\_\_ 1/3-3/3 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  
 the language of publication of the international application (under Rule 48.3(b)).  
 the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority in written form.  
 furnished subsequently to this Authority in computer readable form.  
 The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
 The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4.  The amendments have resulted in the cancellation of:

the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_  
 the drawings, sheets/fig \_\_\_\_\_

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1 - 6	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 6	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 6	YES
	Claims		NO

## 2. Citations and explanations

Reference is made to the following documents:

D1: FR-A-2 808 365 (TRW INC) 2 November 2001 (2001-11-02)

D2: WO 03/093074 A (CARESCHE FRANCOIS; GARNAULT JOEL (FR); MOTZ JOEL (FR); LECONTE ERIC) 13 November 2003 (2003-11-13)

D3: EP-A-1 077 301 (MOTOROLA SEMICONDUCTEURS) 21 February 2001 (2001-02-21)

D4: WO 99/59284 A (PAVATICH GIANFRANCO; ROBERT BOSCH GMBH (DE); SCHMITZ STEPHAN (DE)) 18 November 1999 (1999-11-18)

D5: DE 101 19 512 (VOLKSWAGENWERK AG) 24 October 2002 (2002-10-24)

## 1. Independent Claim 1:

Document D1 is considered the prior art closest to the subject matter of independent claim 1 (the references in parentheses are to D1).

Document D1 discloses a vehicle security system with an access control mechanism having one or more authentication elements (34) that are carried by the user but do not require operation, a vehicle-side access control component (24),

a wireless access authorization communications channel (28, 30) for communications processes between each respective authentication element (34) and the access control component (24) for the purpose of verifying access authorization, said access control component (24) generating a locking or unlocking access control signal for at least one vehicle locking element (22) only when there is a positive verification of access authentication,  
and at least one user-accessible activating element (38) for requesting a locking or unlocking access control signal to be produced, said request triggering the appropriate access authentication-verifying communications process, which is successfully executed only when an authenticating authentication element (34) is located within the predetermined effective range.

Once the activating unit (38) has been actuated, the interference level is measured for various frequencies and the best frequency (RF) is selected.

The request signal is sent at the selected frequency from the access control component (24) to the authentication element (34).

See document D1, page 13, line 4 to page 20, line 8 and the illustrations.

The differences between claim 1 and document D1 are as follows:

- a) A localizing means for the authentication element is incorporated into the vehicle.
- b) A mechanism for performing a null measurement is incorporated into the authentication element, said mechanism detecting the field strength present at a time when no signal is being transmitted by the

vehicle and ascertaining an interference level therefrom and determining on the basis of said ascertained interference level whether or not the signal will be answered.

The objective problem solved by the above features is that of providing a better localization system for keys and thus a more secure access control system.

A person skilled in the art is generally familiar with a vehicle with a localization means, but a mechanism for performing a null measurement and subsequently detecting field strength and ascertaining the interference level that determines on the basis of said ascertained interference level whether it sends a signal or not is not known from the available prior art.

Therefore, the subject matter of claim 1 is novel (PCT Article 33(2)) and inventive (PCT Article 33(3)).

2. Dependent Claims 2 to 5:

Claims 2 to 5 are dependent upon claim 1, and the subject matter of claims 2 to 5 is therefore novel (PCT Article 33(2)) and inventive (PCT Article 33(3)).

3. Independent Claim 6:

The subject matter of claim 6 relates to a method for executing the system described in claim 1.

The arguments presented above with respect to claim 1 also apply correspondingly. Therefore, the subject matter of claim 6 is novel (PCT Article 33(2)) and inventive (PCT Article 33(3)).

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4. The present application thus satisfies the requirements of PCT Article 33(1) because the subject matter of independent claims 1 and 6 is novel within the meaning of PCT Article 33(2) and involves an inventive step within the meaning of PCT Article 33(3).